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**PATENT APPLICATION  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Karl-Hermann, SCHLINGENSIEPEN *et al.*

Application No: 10/591,048

Examiner: To Be Assigned

35 U.S.C. §371 (c) date: March 28, 2007

Group Art Unit: 1641

Attorney Docket No: 4052-003

Confirmation No. 4668

Customer No: 30448

For: PHARMACEUTICAL COMPOSITION

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97(b) and 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the Duty to Disclose under 37 C.F.R. §1.56, the references cited on the accompanying forms PTO/SB/08A and PTO/SB/08B are hereby brought to the attention of the Examiner for independent evaluation. In accordance with the Rules in effect for applications filed after June 30, 2003, copies of U.S. patents and/or patent application publications are not enclosed. Copies of all foreign patents and non-patent references are enclosed herewith. Some of the references were cited in the International Search Report, which is enclosed, and some were noted in the specification of the present patent application.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Applicants respectfully request that the listed documents be considered by the Examiner and made part of the record in the present application and that an initialed copy of forms PTO/SB/08A and PTO/SB/08B be returned in accordance with MPEP §609.

In re Application of Karl-Hermann SCHLINGENSIEPEN, et al  
Application No. 10/591,048  
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Certification

This Statement is being filed before the receipt of the first Office Action on the merits, a fee is not required for consideration of these documents. Nevertheless, should a fee be deemed to be due by the Commissioner, such fee should be charged to Deposit Account No. 50-0951.

Respectfully submitted,

Date: May 17, 2007

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 4

### Complete if Known

Application Number	10/591,048
Filing Date	371 rcvd PTO Aug. 28, 2006
First Named Inventor	Karl-Hermann SCHLINGENSIEPEN,
Art Unit	1641
Examiner Name	To Be Assigned
Attorney Docket Number	4052-003

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> ( <i>if known</i> )			
1	US-	3,854,480	12/17/1974	Zaffaroni	
2	US-	4,452,775	06/05/1984	Kent	
3	US-	4,469,863	09/04/1984	Ts'o, et al	
4	US-	4,675,189	06/23/1987	Kent, et al	
5	US-	5,023,243	06/11/1991	Tullis	
6	US-	5,075,109	12/24/1991	Tice, et al	
7	US-	5,133,974	07/28/1992	Paradissis, et al	
8	US-	5,407,686	04/18/1995	Patel, et al	
9	US-	5,539,082	07/23/1996	Nielsen, et al	
10	US-	5,714,331	02/03/1998	Buchardt, et al	
11	US-	5,719,262	02/17/1998	Buchardt, et al	
12	US-	5,736,152	04/07/1998	Dunn	
	US-				

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> ( <i>if known</i> )				
1	WO 99/63975 A		12/19/1999	Biognostik Gesellschaft Fuer...		
2	WO 94/25588 A		11/10/1994	Biognostik Gesellschaft Fuer...		
3	EP 1008649 A2		06/14/2000	Biognostik Gesellschaft Fuer...		
4	EP 0695354		01/09/2002	Biognostik Gesellschaft Fuer...		
5	EP 0092574 (WO 83/01451)		04/28/1983	Molecular Biosystems, Inc.		

Examiner Signature	Date Considered
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**Complete if Known**

<b>Application Number</b>	10/591,048
<b>Filing Date</b>	371 rcvd PTO Aug. 28, 2006
<b>First Named Inventor</b>	Karl-Hermann SCHLINGENSIEPEN,
<b>Art Unit</b>	1641
<b>Examiner Name</b>	To Be Assigned

Sheet 2

of 4

Attorney Docket Number 4052-003

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	SPEARMEN, M, et al; "Antisense Oligodeoxyribonucleotide Inhibition of TGF-beta1 Gene Expression and Alterations in the Growth and Malignant Properties of Mouse Fibrosarcoma Cells"; Gene, Elsevier Biomedical Press, Amsterdam, NL; Vol. 149.; 1994; pp: 25-29	
	2	HUANG, FEI, et al; "Transforming Growth Factor Beta-1 (TGF-beta-1) is an Autocrine Positive Regulator of Colon Carcinoma U9 Cells in Vivo as Shown by Transfection of a TGF-beta-1 Antisense Expression Plasmid"; Cell Growth and Differentiation; Vol. 6; No. 12; Dec. 1995; pp: 1635-1642	
	3	JACHIMCAZK, P., et al; "Transforming Growth Factor-Beta-Mediated Autocrine Growth Regulation of Gliomas as Detected with Phosphorothioate Antisense with Oligonucleotides"; International journal of Cancer, NY, NY, Vol. 65; No. 3; 26 Jan. 1996; pp: 332-337	
	4	PICON, ANTONIO, et al; "A Subset of Metastatic Human Colon Cancers Expresses Elevated Levels of Transforming Growth Factor Beta-1"; Cancer Epidemiology Biomarkers and Prevention; Vol. 7; No. 6; June 1998; pp: 497-504	
	5	LEE, et al; "Mucosal Penetration Enhancers For Facilitation of Peptide and Protein Drug Absorption"; Critical Reviews in Therapeutic Drug Carrier Systems; Vol. 8; 1991; pp: 91-192	
	6	MURANISHI; "Absorption Enhancers"; Critical Reviews in Therapeutic Drug Carrier Systems; Vol. 7; 1990; pp: 1-33	
	7	WAGNER, et al; "Potent and Selective Inhibition of Gene Expression by an Antisense Heptanucleotide"; Nature Biotechnology; Vol. 14; July 1996; pp: 840-844	
	8	WENGEL, J., et al; "LNA (Locked Nucleic Acid)"; Nucleosides & Nucleotides; Vol. 18 (6 & 7); 1999; pp: 1365-1370	
	9	HARDMAN, et al, eds.; Section VI Drugs Affecting Gastrointestinal Function; McGraw-Hill; NY, NY; 1996; pp: 934-935	
	10	WIKSTROM, P, et al : <del>Transforming Growth Factor b1 and Prostate Cancer</del> , Scand J. Urol Nephrol 34, Sweden No date	

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PTO/SB/08B (09-06)

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Substitute for form 1449/PTO				Complete if Known	
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				Art Unit	1641
				Examiner Name	To be assigned
Sheet	3	of	4	Attorney Docket Number	4052-003

NON PATENT LITERATURE DOCUMENTS				
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	11	GOODCHILD J.; Bioconjugate Chemistry "Conjugates of Oligonucleotides and Modified Oligonucleotides: A Review of Their Synthesis and Properties, May/June 1990, Volume 1, No.3		
	12	<del>KOCH T.; Locked nucleic acids: a family of high-affinity nucleic acid probes,</del> Journal of Physics: Condensed Matter No date, volume, issue, or page		
	13	<del>IANGER R. New Methods of Drug Delivery. September 1990</del> no journal identified, volume, issue, or page		
	14	CHRISTENSEN, et al.; A Novel Class of Oligonucleotide Analogues Containing 2'-0,3'-Linked [3.2.0]Bicycloarabinonucleoside Monomers: Synthesis, Thermal		
		Affinity Studies, and Molecular Modeling; 1998 America Chemical Society		
	15	<del>NIELSEN, P., et al.; Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide</del>		
	16	UHLMANN, E. et al.; Chemical Reviews "Antisense Oligonucleotides: A New Therapeutic Principle, Volume 90, Number 4, June 1990		
	17	FROEHLER, B., et al.; Synthesis of DNA via deosynucleoside H-phosphonate intermediates, Nucleic Acids Research, Volume 14 Number 13 1986		
	18	GAFFNEY B., et al.; Large-Scale Oligonucleotide Synthesis By The H-Phosphonate Method; Tetrahedron Letters, Vol. 29, No. 22, pp 2619-2622, 1988		
	19	GAREGG, J. et al.; Nucleoside H-Phosphonates. IV. Automated Solid Phase Synthesis Of Oligooribonucleotides By The Hydrogenphosphonate Approach; Tetrahedron Letters, Vol 27		

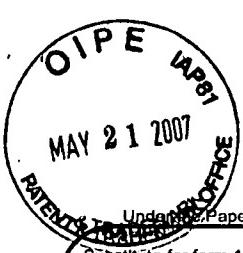
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**Complete if Known****INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet 4

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	20	GAREGG J., et al.; Nucleoside H-Phosphonates. III. Chemical Synthesis of Oligodeoxyribonucleotides by the Hydrogenphosphonate Approach; Tetrahedron Letters, Vol 27, No. 34	no date
	21	WOJTOWICZ-PRAGA, S.; Reversal of tumor-induced immunosuppression by TGF-B inhibitors; Investigational New Drugs 21: 21-32, 2003	
	22	BEAUCAGE S.L. et al; Deoxynucleoside Phosphoramidites-A New Class of Key Intermediates for Deoxypolynucleotide Synthesis; Tetrahedron Letters, Vol. 22, No. 20	
	23	BUUR, A. et al.; Penetration Of 5-Fluorouracil And Prodrugs Across The Intestine Of The Albino Rabbit: Evidence For Shift In Absorption Site From The Upper To The Lower Region	
		Of the Gastrointestinal Tract By Prodrugs; Journal of Controlled Release, 14 (1990) 43-51	
	24	EL-HAIRI, L., et al; The Mitigating Effects Of Phosphatidylcholines On Bile Salt-and Lysophosphatidylcholine-induced Membrane Damage; J. Pharm Pharmacol. 1992 44: 651-654	
	25	YAMASHITA, S. et al.; Effects of diclofenac sodium and disodium ethylenediaminetetraacetate on electrical parameters of mucosal membrane and their relation to the permeability enhancing effects in the rat jejunum; J.Pharm, Pharmacol, 1987, 39: 621-626	

Examiner Signature	/Louis Wollenberger/	Date Considered	09/15/2009
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